CLAIMS

	What is claimed is:
1 8	1. Amethod for decoding compressed video comprising:
2	reading a stream of compressed video into a memory, said
3	video having multiple pictures, each picture having one or more
4	independent elements;
5	assigning, via a first processor of a group of processors sharing
6	said memory, at least one independent element per processor to be
7	decoded by the processors in parallel; and
8	decoding the independent elements of the video in parallel.
1	2. The method of claim 1, wherein the independent elements
2	include slices.
1 *	11843) 3 The method of claim 2 subarain assigning the index on days

- The method of claim 2, wherein assigning the independent
- elements includes assigning a varying number of slices to individual 2
- 3 processors.
- 4. The method of claim 3, wherein assigning the independent 1
- elements includes assigning a comparable work load to the processors. 2
- 5. The method of claim 4, wherein assigning the independent 1
- elements includes placing in memory as a local variable, for each 2
- processor, the slices to be decoded by a respective processor. 3

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1	6. The method of claim 5, wherein each slice includes at least one
2	macroblock.
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1	7. The method of claim 6, wherein said video is encoded in MPEG.
1	8. The method δf claim 7, wherein the method of decoding is
2	performed in real-time.
1	9. A computer-readable medium having stored thereon a set of
2	instructions, said set of instruction for decoding compressed video, which
3	when executed by a processor, cause said processor to perform a method
4	comprising:
5	reading a stream of compressed video into a memory, said
6	video having multiple pictures, each picture having one or more
7	independent elements;
8	assigning, via a first processor of a group of processors sharing
9	said memory, at least one independent element per processor to be
10	decoded by the processors in parallel; and
11	decoding the independent elements of the video in parallel.
1	10. The computer-readable medium of claim 9, wherein the
2	independent elements include slices

1	11. The computer-readable medium of claim 10, wherein assigning
2	the independent elements includes assigning a varying number of slices to
3	individual processors.
1	12. The computer-readable medium of claim 11, wherein assigning
2	the independent elements includes assigning a comparable work load to
3	the processors.
1	13. The computer readable medium of claim 12, wherein assigning
2	the independent elements includes placing in memory as a local variable,
3	for each processor, the slices to be decoded by a respective processor.
1	14. The computer-readable medium of claim 13, wherein each slice
2	includes at least one macroblock.
1	15. The computer-readable medium of claim 14, wherein said
2	video is encoded in MPEG standard.
1	16. The computer-readable medium of claim 15, wherein the
2	method of decoding is performed in real-time.
1	17. A computer system comprising:
2	a plurality of processors ;
3	a memory coupled to said plurality of processors;

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4	a first unit of logic to read a stream of compressed video into
5	said memory, said video having multiple pictures, with each picture
6	having one or more independent elements; and
7	said first unit of logic further assigns, via a first processor of
8	said group of processors sharing said memory, at least one independent
9	element per processor to be decoded by the processors in parallel.

- 1 18. The computer system of claim 17, wherein the independent elements include slices.
- 19. The computer system of claim 18, wherein said first unit of logic assigns a varying number of slices to individual processors.
- 20. The computer system of claim 19, wherein said first unit of
 logic assigns a comparable work load to the processors.
- 1 21. The computer system of claim 20, wherein said first unit of
- 2 logic places in memory as a local variable, for each processor, the slices to
- 3 be decoded by a respective processor.
- 1 22. The computer system of claim 21, wherein each slice includes at
- 2 least one macroblock.

- 1 23. The computer system of claim 22, wherein said video is
- 2 encoded in MPEG standard.
- 1 24. The computer system of claim 23, wherein system computer
- 2 system decodes said video in real-time.